SITUATIONAL ANALYSIS ON SAFETY AND HEALTH IN PRIMARY SCHOOL IN KOTA BHARU

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ABSTRACT

Background : Safety and health is one of major concerns in public health issues. There are lots of injuries or accidents reported in the news which include school accidents and injuries.

Methodology : This survey was conducted among head of primary schools in Kota Bharu from May to June 2004. The objective of this study was to investigate the awareness about safety and health status among school's head using a questionnaire.

Result : The study showed that knowledge on safety and health among the school's heads were relatively low (7.7%). Forty-two percent of the schools did not implement any safety and health programme while more than 50 % did not have safety policies in their school.

Conclusions : It is necessary to have specific safety programmes in school in order to improve the safety and health awareness among teachers, staff, students and community.

Keywords : Safety And Health, School Injury, OSHA 1994.

INTRODUCTION

Injury is a big problem universally. Injury is defined as a consequence of interactions between the physical and social environment and the individual, and it is potentially foreseeable and preventable[1]. A reportable school injury is one that causes the student to miss one-half day or more of school, or one that is serious enough to require a doctor's care[2]. For at least ten months of each year, children spend the majority of their days in school. In certain countries, 25 percent of childhood injuries occur within the school environment, though only few schools have explicit injury prevention programmes[3].

A reportable injury can occur in many ways such as going to or from school, on a school-related activity (field trip, athletic event, etc), before or after school, or in a classroom, gymnasium, field or any school locations[4]. A study in United States of America indicated that school-age children are nine times more likely to sustain unintentional injury than to be the victim of an intentional injury while at school. Unintentional injuries can be defined as those injuries that could be avoided if necessary precautions are taken. Playgrounds are associated with the majority of injuries among elementary school students (NSKC, 2004) .

There are many factors that put students at risk to injuries including poor monitoring and supervision of children, risk-taking behaviors among students, poor-decision skills among students, inadequately maintained equipment, lack of staff awareness of injury prevention, lack of conditioning especially in sports-related injuries and lack of knowledge regarding appropriate safety procedures[5]. In the USA, the five leading causes of injury deaths among children under age of 15 years are motor vehicle injuries, fires and burns, drowning, firearms and suffocation[6].

The Malaysian Occupational Safety and Health Act 1994 (OSHA 1994) provides a legislative framework to promote, stimulate and encourage high standards of safety and health at workplace. The aim of the act is to promote safety and health awareness and establish effective programmes to suit the industries needs and implementation of the law through self-regulation schemes is designed to suit particular organization. The long-term goal of the act is to create a healthy and safe working culture among all Malaysian employees and employers. A school is considered a place of work. In the Act, "place of work" means premises where persons work or premises used for the storage of plant and substance[7]. To date about 12 million of working population are now protected under this act[8]. Therefore, students and teachers are not left behind. Therefore, duties of the employers are to ensure safety or to avoid existing hazards among people working and the people not at work from the activities of the people at work. Adherence to the act as well as safety and health programme will minimize the risk of injury or disease. The objective of this study was to investigate the awareness about safety and health status among primary school's head as well as its implementation in their school.

METHODOLOGY

A cross sectional study was conducted among headmaster and headmistress of selected primary schools in Kota Bharu, Kelantan from May to June 2004. There were 90 primary schools in Kota Bharu district; however due to response rate and availability of the heads, only 52 school's heads which represent their schools were selected in this survey using random sampling. The objective of the study was to investigate the awareness of safety and health among the heads of the school. A questionnaire consists of 10 questions particularly eliciting issues of Occupational Safety and Health (OSH) such as OSH policy, OSH status in school, and knowledge on OSHA 1994, OSH Management System (OSH-MS) as well as safety and health programme in school. All heads of schools were interviewed by phone to obtain the above information. Some terminologies were used to measure awareness towards OSH issues. By definition, the implementation of OSHA in the workplace is connected or related to other OSH issues such as OHS policy, OSH-MS OSH audit as well as training among employees. These are shown as a part of the organizational safety culture in the workplace. Two terms, namely good and poor were used to determine the understanding of health and safety in schools. A good knowledge of OSHA refers to an understanding of the legislative requirements and its liabilities to ensure the health and safety in the workplace. While, poor knowledge of OSHA means a little bit knowledge about the act and its provision. Data was analyzed using SPSS version 12. Univariate analyses were carried out to describe the safety and health situational issues.

RESULTS

Characteristic of respondents

There seemed to be a fair representation of both sexes becoming headmaster or headmistresses of the primary school. The school's head were 52, which 60 % of the selected primary schools in Kota Bharu district. All from Malay ethnic race and were aged in range between 47 – 54 years. Most of them have been teaching for more than 20 years in schools and were qualified with diploma in education (Table 1).

Table 1 Demographic Data of the School's Head

Variable	Percentage	Range
Sex		-
Male	53.9 %	
Female	46.1 %	
Age	-	47-54 years
Teaching experience		
Below than 20 yeas	42.4%	
More than 20 years	57.6 %	
Qualification		
Diploma	38.5%	
Certificate	61.5%	

Knowledge on OSHA 1994 and its provision in school

Majority of the heads in schools do not have knowledge on OSHA and that was represented by 92.3 % of schools interviewed. Only 7.7% said that they have a little bit of knowledge about the OSHA (Table 2). Information or knowledge about safety and health legislation were gathered through mass media such as television, radio or newspaper, and from safety and health campaign rather than specific trainings or courses on safety and health.

The survey also showed that most of the schools surveyed did not have a copy of Occupational Safety and Health Act (OSHA 1994). Only 14% of the heads said that they have been supplied with this Act. Some of them noted that, guidelines or circulars on safety and health were sent to the schools by the state Department of Education (Table 2).

OSH Policy and OSH Programme in School

More than three-quarter of the schools (84.65%) surveyed did not have occupational safety and health policy to promote safety and health practice among students, teachers and other staffs. Only 15.4% of the heads said there were occupational safety and health policy implemented in their schools (Table 2). Most of the schools in district surveyed did not have a safety and health programme in their school.

They also noted that their schools had been implemented safety and health programmes, which represent about 40% of the school surveyed (Table 2). These programmes were seen by a series of OHS programme such as planning and acting out emergency responses, fire drills and safety guidelines for laboratories. Besides, they conducted a few campaigns or activities like "Healthy School Projects" to promote a healthy lifestyle among students and teachers. Furthermore, they also invited other government officers such as from the Department of Health, Police and Fire and Rescue Department to give talks on safety and health.

OSH Management system and audit in school

Most schools (51.9%) did not have any OSH Management system in place. There were 48.1 % which implemented some sort of OSH management system. Only, 10 (5.2%) of the schools have an OSH audit done on or by them (Table 2).

Table 2   Knowledge on OSHA and other OSH aspects in school

	Yes	No
Knowledge on OSHA 1994	4 (7.7%)	48 (92.3%)
Provision of OSHA copies in school	7 (13.5%)	45 (86.5%)
OSH Policy in school	8 (15.4%)	44 (84.6%)
OSH programme in school	22 (42.3 %)	30 (57.7%)
OSH system in school	25 (48.1%)	27 (51.9%)
OSH audit in school	10 (5.2 %)	42 (94.8%)

OSH Status in School

Fifty-percent of the school's heads agreed that it was necessary to improve the OSH status in their school. Seventy-five percent of the school's head admitted that there were students who had some accidents or other injuries outside their schools (such as road accidents while going to or from school and during school related activities). Most of school's valuable properties were deemed safe from been stolen. Twenty-eight of the school's head said that the school properties were not totally safe from burglary despite store rooms in schools were all provided with safety grills. About ninety percent of the school's head said the movements of visitors in their schools were under supervision while only 8.6% of the school's head said that visitors were not under good supervision (Table 3).

Table 3   Necessity of improving OSH status in school

OSH Issues	No (%)
Improving OSH status in school	
Really Necessary	27 (51.9%)
Necessary	25(48.1%)
Accident and Injuries outside the school area	
Yes	39 (75.0%)
No	13 (25.0%)
Supervision of movement of visitors in school	
Yes	25 (48.1%)
No	27 (51.9%)
Security status of school properties	
Yes	37 (71.2%)
No	15 (28.8%)

DISCUSSIONS AND RECOMMENDATIONS

Safety and security among school children is an important aspect of health. Providing a safe and secure environment is a top priority for educators throughout the country. Through careful evaluation, planning and communication, we can help maintain a safe learning environment. According to the OSHA, employers should write a policy statement to indicate that the management accepts and commits responsibility for safety and health of the employees and others who may be affected by the work activities. The policy should explain the commitment of organization for safety and health to all levels of management, the role of workers, the implementation of the policy, the structure and functions of safety and health committees and other in-house safety and health arrangements. Written policy documents deal with practical systems and procedures. It concerns mainly potential hazards and methods of dealing with them.

There is minimal number of written statement or audit on safety and health establishment in the schools surveyed. Auditing plays an important role in accessing the effectiveness of occupational safety and health system in an organization. From auditing, we can define the strength and weaknesses of our OSH system and initiate efforts for improvement. Besides, students are covered by policy insurance to cover from any injuries or accidents during school hours, school related activities or outdoor activities.

There was no specific evidence of the Ministry of Education providing all their schools with a copy of OSHA. The Act covers all persons at work in all sectors, including public services and statutory bodies. Public services also do have occupationally related health problems among their workers, whereby any event present at the place of work that can cause ill health to the population of workers should be considered a public health problem. Section 16 of the Act employers to write safety and health policy at the workplace and also should inform their employees, but neither of the policy has been written nor displayed in the school. Besides, section 30 also states that employer should establish safety and health committee at the place of work (ILBS, 1999). Both of the section would include school premises, which usually have at least 50 teachers and other staffs employed. Through OSH committee, employers should provide arrangements for carrying out the policy. Arrangements could include safety and health

management system or programmes to control hazards in school, around the school or student's routes to or from school such as arrangements could also include checklists and guidelines regarding safety and health in schools. Universities, NIOSH and DOSH are places school can come to for help to initiate these events

Majority of primary schools in the district surveyed did not have any specific safety and health programme. Some specific activities prescribed were emergency response planning and trainings such as fire drills and safety guidelines in laboratories used by teachers, staffs and students. Some schools though held campaigns to promote a safe and healthy lifestyle among students and teachers. Currently, the Ministry of Health is holding some health programmes among school children, which specifically for immunization and medical surveillance among students.

Children are exposed to accidents and injuries every day while going to or from school. Therefore, we should be prepared to improve traffic congestion to provide a safer environment for pedestrians, bicyclists, and motorists alike, and promote safety-awareness among children walking and cycling to school. These strategies will help reduce accidents and injuries among school children who walk or cycle to school which most of then do.

As we know that, teachers spend most of their daytime in school in teaching indoor and outdoor activities with school children. They should be appointed to observe at the school gate until all students go back after school hours. Providing schools with telephone system including emergency phone is one example of a good safety arrangement in school. By implementing the principle of SOS 'Save Our Soul" in schools, students, teachers and staff can directly contact a school authority to report any accidents or injuries occurring in the school. Developing a safety and health programme or system in school can reduce the risk of injury and create a safety work style besides enhancing safety-awareness among children, teachers and staffs. A programme is defined as a set of projects planned with the specific objectives in mind usually run over a long-term period.

There are five tips for enhancing safety and security of students in school.

1. Make a safety policy and procedures readily available to students, teachers, staffs and parents.
2. Provide open lines of communication for students, staffs and parents. It may help

to identify potential dangers in schools. Schools should appoint and train a teacher to be the secretary of OSH committee to monitor safety and health in school. A secretary should not be the PK HEM but it can be appointed among other teachers and allowed them for a job promotion. PK HEM has so much of other things to do while SHO has so much of responsibilities to deliver.

3. Educate parents, teachers and staffs in perceiving warning signs of troubled students who could be victim of violence or teen flights, domestic violence and drug-trafficking.
4. Anticipate behavior problems through behavior profiling by counselors. Behaviors problem could be risk-taking behaviours, truancy, fighting friends, cigarette smoking and other miss conducts.
5. Conduct "safe school' training for new teachers, staffs and students. Training should be site-based because every environment is different and provides unique safety challenges.

These are the following activities should be implemented to increase awareness of school injury prevention:

1. Publication of a Students Injury Report quarterly and maintaining an accurate and current school injury data base
2. Publication of articles in professional journals using school injury data
3. Continuing education for persons who complete the school injury reporting forms
4. Educating all school inspector regarding data findings
5. Providing current data to any interested party, revising the reports as necessary in order to improve data collection

Protecting school does not necessarily result from an expensive solution. Protection can be accorded by fire alarms, fire extinguishers, as well as evacuation plans and other forms of fire protection actuation to ensure the safety of occupants and early attention of fire fighters. Laboratories are the important places of risk to fire and other injuries. It should be made prepared with risk management strategy focused on preventing such as incidents. Schools with security systems can reduce the cost of vandalism and theft. Sound housekeeping like ensuring rubbish bins are empty and kept away from the fence and having security and periodic patrols help discourage would-be trespassers.

CONCLUSION

The study has shown that the status of safety and health in among school's head are low thus needs an improvement. This was based on their safety and health knowledge, related issues and OSH programme in school. Therefore, school personnel needs trainings in OSH to ensure the safety and healthy culture in schools. Besides, school-based unintentional programme should be implemented as well as an international injury combating programme should become a national agenda. These programme could be part of a coordinated school health program and should reach all students from pre-schools to secondary schools. School leaders, community leaders, and families should commit to implement a programmme combating injuries in schools. Such support is crucial to promote S&H in academic environments. Data on prevalence of accidents and injuries among school children is hard to come by and as such good documentation is highly required. The Ministry of Education could play more important role in the primary prevention of accidents and injuries as well as promotion of S&H in schools through advocacy, data collection and education as well as of research to address this problem. Protecting schools is albeit, also the responsibility teachers and their local communities.

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